SEQLIST.TXT

SEQUENCE LISTING

```
<110> Albert, Lai
<120> NOVEL SPLICE VARIANTS OF HUMAN DKK11
<130> PP023359.0003
<140> 10/574182
<141> 2007-05-31
<150> PCT/US04/34256
<151> 2004-09-30
<150> 60/507682
<151> 2003-09-30
<160> 28
<170> FastSEQ for Windows Version 4.0
<210> 1
<211> 819
<212> DNA
<213> Homo sapien
<400> 1
atgggagaag cctccccacc tgcccccgca aggcggcatc tgctggtcct gctgctgctc 60
ctctctaccc tggtgatccc ctccgctgca gctcctatcc atgatgctga cgcccaagag 120
agctecttgg gteteacagg cetecagage etactecaag getteageeg actttecetg
aaaggtaacc tgcttcgggg catagacagc ttattctctg cccccatgga cttccggggc 240
ctccctggga actaccacaa agaggagaac caggagcacc agctggggaa caacaccctc 300
tccagccacc tccagatcga caagaggacc gacaacaaga caggagaggt gctgatctcc 360
gagaatgtgg tggcatccat tcaaccagcg gaggggagct tcgagggtga tttgaaggta 420 cccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga cagcttccac 480 acagaactcc atccccgggt ggccttctgg atcattaagc tgccacggcg gaggtcccac 540 caggatgccc tggagggcgg ccactggctc agcgagaagc gacaccgcct gcaggccatc 600
cgggatggac tccgcaaggg gacccacaag gacgtcctag aagaggggac cgagagctcc
teccaeteca ggetgtecce ecgaaagace caettactgt acatecteag geeetetegg
                                                                            720
cagctgtagg ggtggggacc ggggagcacc tgcctgtagc ccccatcaga ccctgccca 780
agcaccatat ggaaataaag ttctttctta catctaaca
<210> 2
<211> 242
<212> PRT
<213> Homo sapien
<400> 2
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
                                         10
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Pro
                                                            30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
                                40
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
                           55
                                                   60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
                                                                     80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Arg Thr Asp Asn
                                             Page 1
```

```
105
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
115 120 125
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
130 140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
                                               155
                                                                       160
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
                   165
                                          170
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
                                      185
                                                             190
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
195 200 205
His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser His Ser Arg
                            215
                                                    220
Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
225 230 235 240
Gln Leu
<210>3
<211> 733
<212> DNA
<213> Homo sapien
<400> 3
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctggtga tecectccgc tgcagetect atccatgatg ctgacgccca 120
agagagetee ttgggtetea caggeeteea gageetaete caaggettea geegaetttt cetgaaaggt aacetgette ggggeataga cagettatte tetgeeeeea tggaetteeg gggeeteeet gggaactaee acaaagagga gaaceaggag caecaggetgg ggaacaacae
                                                                              300
cctctccagc cacctccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat
                                                                              360
ctccgagaat gtggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa 420
ggtacccagg atggaggaga aggaggccct ggtacccatc cagaaggcca cggacagctt
ccacacagaa ctccatcccc gggtggcctt ctggatcatt aagctgccac ggcggaggtc
ccaccaggat gccctggagg gcggccactg gctcagcgag aagcgacacc gcctgcaggc
                                                                             600
catccgggat ggactccgca aggggaccca caaggacgtc ctagaagagg ggaccgagag
ctcctcccac tccaggctgt cccccgaaa gacccactta ctgtacatcc tcaggccctc
                                                                             660
                                                                              720
tcggcagctg tag
<210> 4
<211> 242
<212> PRT
<213> Homo sapien
<400> 4
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Pro
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu 50 _ _ 60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly 65 70 75 80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
                                     105
                                                             110
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
115 120 125
                                                        125
                                              Page 2
```

```
SEQLIST.TXT
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
     130
                           135
                                                  140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
145
                       150
                                             155
                                                                    160
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
                  165
                                         170
                                                                175
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp
                                                          Leu Ser Glu
                                    185
                                                           190
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
         195
                                200
                                                      205
His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser
                                                 Ser Ser His Ser Arg
     210
                           215
                                                  220
Leu Ser Pro Arg Lys Thr His Leu Leu Tyr
                                             Ile Leu Arg Pro Ser Arg
225
                       230
                                             235
Gln Leu
<210> 5
<211> 733
<212> DNA
<213> Homo sapien
<400> 5
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctggtga tcccctccac tgcagctcct atccatgatg ctgacgccca 120
agagagetee tigggietea caggeeteca gageetacte caaggetica geegactitt 180
cctgaaaggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 240
gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
cctctccagc cacctccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat 360 ctccgagaat gtggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa 420 ggtacccagg atggaggaga aggaggcct ggtacccatc cagaaggcca cggacagctt 480 ccacacagaa ctccatccc gggtggcctt ctggatcatt aagctgcac ggcggaggtc 500
ccaccaggat gccctggagg gcggccactg gctcagcgag aagcgacacc gcctgcaggc
                                                                          600
catccgggat ggactccgca aggggaccca caaggacgtc ctagaagagg ggaccgagag 660
ctcctccac tccaggctgt cccccgaaa gacccactta ctgtacatcc tcaggcctt
tcggcagctg tag
<210> 6
<211> 242
<212> PRT
<213> Homo sapien
<400> 6
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
                                        10
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
                                                           30
Ile His Asp Ala Asp Ala Gin Glu Ser Ser Leu Gly Leu Thr Gly Leu
                                                      45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
    50
                           55
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
                      70
                                             75
                                                                    80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
             100
                                                           110
                                    105
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
                               120
         115
                                                      125
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
                           135
                                                 140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
                                            Page 3
```

```
SEQLIST.TXT
                        150
                                                155
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
                   165
                                           170
                                                                   175
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
              180
                                      185
                                                              190
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
195 200 205
His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser His Ser Arg
210 215 220
                                               Ile Leu Arg Pro Ser
235
Leu Ser Pro Arg Lys Thr His Leu Leu Tyr
225
Gln Leu
<210> 7
<211> 733
<212> DNA
<213> Homo sapien
<400> 7
caccatggga gaagcetece cacctgeece egeaaggegg catctgetgg teetgeteet 60 geteetetet accetggtga teeceteeae tgeageteet atceatgatg etgaegeeca 12
agagagetee tigggietea caggeeteea gageetacte caaggettea geegaettit
cctgaaaggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg
gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300
cctctccagc cacctccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat
ctccgagaat gtggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa
ggtacccagg atggaggaga aggaggccct ggtacccatc cagaaggcca cggacagctt ccacacagaa ctccatcccc gggtggcctt ctggatcatt aagctgccac ggcggaggtc
                                                                              480
                                                                              540
ccaccaggat gccctggagg gcggccactg gctcagcgag aagcgacacc gcctgcaggc catccgggat ggactccgca aggggaccca caaggacgtc ctagaagagg ggaccgagag ctcctccac tccaggctgt cccccgaaa gacccactta ctgtacatcc tcaggccctc
                                                                              600
                                                                              660
                                                                              720
tcggcagctg tag
<210> 8
<211> 242
<212> PRT
<213> Homo sapien
<400> 8
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
                                          10
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
                                      25
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
                                 40
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu 50 60
                                                    60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
              100
                                      105
                                                              110
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
                                 120
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
                            135
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
                       150
                                               155
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
                                          170
                                              Page 4
```

```
SEQLIST.TXT
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
                                     185
                                                           190
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
195 200 205
    Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser His Ser Arg
                           215
                                                  220
                      Thr His Leu Leu Tyr
                                             Ile Leu Arg Pro Ser
225
Gln Leu
<210> 9
<211> 733
<212> DNA
<213> Homo sapien
<400> 9
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
getectetet accetggtga teccetecae tgeageteet atceatgatg etgaegeeea 120
agagagetee ttgggtetea caggeeteea gageetaete caaggettea geegaetttt 180
cctgaaaggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 240 gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac 300 cctctccagc cacctccaga tcgacaagat gaccgacaac aagacaggag aggtgctgat 360
ctccgagaāt gtggtggcāt ccāttcaācc āgcggagggg agcttcgāgg gtgatttgaa
                                                                           420
ggtacccagg atggaggaga aggaggccct ggtacccatc cagaaggcca cggacagctt
                                                                           480
ccacacagaa ctccatcccc gggtggcctt ctggatcatt aagctgccac ggcggaggtc
ccaccaggat gccctggagg gcagccactg gctcagcgag aagcgacacc gcctgcaggc
                                                                          600
catccgggat ggactccgca aggggaccca caaggacgtc ctaaaagagg ggaccgagag
ctcctcccac tccaggctgt ccccccgaaa gacccactta ctgtacatcc tcaggccctc
                                                                          660
                                                                           720
tcggcagctg tag
<210> 10
<211> 242
<212> PRT
<213> Homo sapien
<400> 10
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
                               40
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly 65 70 75 80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
             100
                                    105
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
                                120
                                                      125
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
    130
                           135
                                                  140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
                                             155
                      150
                                                                    160
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
                  165
                                         170
                                                               175
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu Ser Glu
                                    185
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
```

Page 5

```
SEQLIST.TXT
         195
                              200
                                                    205
His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser His Ser Arg
    210
                         215
                                               220
Leu Ser Pro Arg Lys Thr His Leu Leu Tyr
                                          Ile Leu Arg Pro Ser Arg
235 240
                     230
225
Gln Leu
<210> 11
<211> 733
<212> DNA
<213> Homo sapien
<400> 11
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctggtga tcccctccac tgcagctcct atccatgatg ctgacgccca 120
agagagetee tigggietea caggeeteea gageetacte caaggetica geegaetitt
cctgaaaggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 240
gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac
cctctccagc cacctccaga tcgacaagat gaccgacáac aagacággág ággtgctgat
                                                                      360
ctccgagaat gtggtggcat ccattcaacc agcggagggg agcttcgagg gtgatttgaa
ggtacccagg atggaggaga aggaggccct ggtacccatc cagaaggcca cggacagctt
                                                                      420
ccacacagaa ctccatcccc gggtggcctt ctggatcatt aagctgccac ggcggaggtc
                                                                       540
ccaccaggat gccctggagg gcggccactg gctcagcgag aagcgacacc gcctgcaggc
                                                                      600
catccgggat ggactccgca aggggaccca caaggacgtc ctagaagagg ggaccgagag
                                                                      660
ctcctcccac tccaggctgt ccccccgaaa gacccactta ctgtacatcc tcaggccctc
                                                                      720
teggeagetg tag
<210> 12
<211> 242
<212> PRT
<213> Homo sapien
<400> 12
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
                                      10
                                                            15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
                         55
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly
                     70
                                          75
                                                                80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
                                      90
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Met Thr Asp Asn
             100
                                  105
                                                       110
Lys Thr Gly Glu Val Leu Ile Ser Glu Asn Val Val Ala Ser Ile Gln
                              120
                                                   125
Pro Ala Glu Gly Ser Phe Glu Gly Asp Leu Lys Val Pro Arg Met Glu
                         135
                                               140
Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe His
                     150
                                          155
Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro Arg
165 170 175
Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser Glu
                                  185
Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly Thr
                                                   205
                             200
His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser His Ser Arg
210 215
                         215
                                               220
```

Page 6

```
SEQLIST.TXT
Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser Arg
225
                                          235
Gln Leu
<210> 13
<211> 640
<212> DNA
<213> Homo sapien
<400> 13
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctggtga tecectecge tgcagetect atecatgatg etgacgecea 120
agagagetee ttgggtetea caggeeteea gageetacte caaggettea geegaetttt
cctgaaaggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg
                                                                     240
gggcctccct gggaactacc acaaagagga gaaccaggag caccagctgg ggaacaacac
                                                                     300
cctctccagc cacctccaga tcgacaaggt acccaggatg gaggagaagg aggccctggt 360
acccatccag aaggccacgg acagcttcca cacagaactc catcccggg tggccttctg 420
gatcattaag ctgccacggc ggaggtccca ccaggatgcc ctggagggcg gccactggct 480
cagcgagaag cgacaccgcc tgcaggccat ccgggatgga ctccgcaagg ggacccacaa 540
ggacgtccta gaagagggga ccgagagctc ctcccactcc aggctgtccc cccgaaagac 600
ccacttactg tacatcctca ggccctctcg gcagctgtag
<210> 14
<211> 211
<212> PRT
<213> Homo sapien
<400> 14
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
                                     10
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
                             40
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
50 55 60
                                              60
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly 65 70 75 80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Val
            100
                                 105
                                                      110
Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe
                             120
                                                  125
His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro
                         135
                                             140
Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser
                    150
                                         155
                                                              160
Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu
                                                         Lys Gly
175
                165
                                     170
Thr His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser
180 185
                                                      190
Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser
        195
                             200
Arg Gln Leu
    210
<210> 15
<211> 640
<212> DNA
```

<213> Homo sapien

```
<400> 15
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctectetet accetggtga tecceteege tgeagefeef atceafgafg etgaegeeea 120
agagagetee ttgggtetea caggeeteea gageetaete caaggeetea geegaettet 180
cctgaaaggt aacctgcttc ggggcataga cagcttattc tctgccccca tggacttccg 240
gggcetecet gggaactace acaaagagga gaaccaggag caccagetgg ggaacaacac
                                                                      300
cctctccagc cacctccaga tcgacaaggt acccaggatg gaggagaagg aggccctggt 360
acccatccag aaggccacgg acagcttcca cacagaactc catccccggg tggccttctg
                                                                      420
gatcattaag ctgccacggc ggaggtccca ccaggatgcc ctggagggcg gccactggct
                                                                      480
cagcgagaag cgacaccgcc tgcaggccat ccgggatgga ctccgcaagg ggacccacaa
                                                                      540
ggacgtecta gaagaggaga eegagagete eteceaetee aggetgteee eeegaaagae 600
ccacttactg tacatcctca ggccctctcg gcagctgtag
<210> 16
<211> 211
<212> PRT
<213> Homo sapien
<400> 16
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
                                      10
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gin Ser Leu Leu Gin Gly Phe Ser Arg Leu Phe Leu Lys Gly Asn Leu
                         55
Leu Arg Gly Ile Asp Ser Leu Phe Ser Ala Pro Met Asp Phe Arg Gly 65 70 75 80
Leu Pro Gly Asn Tyr His Lys Glu Glu Asn Gln Glu His Gln Leu Gly
85 90 95
Asn Asn Thr Leu Ser Ser His Leu Gln Ile Asp Lys Val Pro Arg Met
                                 105
Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser Phe
115 120 125
His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu Pro
130 135 140
Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Gly His Trp Leu Ser
145 150 155 160
Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys Gly
165 170 175
Thr His Lys Asp Val Leu Glu Glu Glu Thr Glu Ser Ser
180 185
Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro Ser
        195
                             200
Arg Gln Leu
    210
<210> 17
<211> 499
<212> DNA
<213> Homo sapien
<400> 17
caccatggga gaagcetece cacctgeeee egeaaggegg catetgetgg teetgetget 60
gctcctctct accctggtga tcccctccgc tgcagctcct atccatgatg ctgacgccca
agagagetee tigggietea caggeeteea gageetaete caaggeitea geegaettit
cctgaaagta cccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga
cagettecae acagaactee ateccegggt ggeettetgg ateattaage tgecaeggeg
gaggtcccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct
gcaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctaa aagaggggac 420
cgagagetee teccacteea ggetgteece eegaaagace caettactgt acatecteag 480
                                         Page 8
```

```
<210> 18
<211> 164
<212> PRT
<213> Homo sapien
<400> 18
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
                                       10
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
Ile His Asp Ala Asp Ala Glin Glu Ser Ser Leu Gly Leu Thr Gly Leu
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
65 70 75 80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
                 85
                                       90
Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
100 105 110
        Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
                              120
Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His
                         135
                                               140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg
145
                                                                 160
Ser Arg Gln Leu
<210> 19
<211> 499
<212> DNA
<213> Homo sapien
<400> 19
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
getectetet accetggtga teceeteege tgeageteet atecatgatg etgacgeeca
agagagctcc ttgggtctca caggcctcca gagcctactc caaggcttca gccgactttt
cctgaaagta cccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga
cagcttccac acagaactcc atccccgggt ggccttctgg atcattaagc tgccacggcg
gaggtcccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct
gcaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctaa aagaggggac 420 cgagagctcc tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatcctcag 480
gccctctcgg cagctgtag
<210> 20
<211> 164
<212> PRT
<213> Homo sapien
<400> 20
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
                                      10
                                                            15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
                                  25
            20
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
35 40 45
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg
```

75 Page 9

55

Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp

```
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
85 90 95
Pro Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
100 105 110
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His
                         135
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro
145
                     150
                                          155
Ser Arg Gln Leu
<210> 21
<211> 499
<212> DNA
<213> Homo sapien
<400> 21
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctcctctct accctggtga tcccctccgc tgcagctcct atccatgatg ctgacgccca
                                                                     120
agagagetee tigggietea caggeeteea gageetaete caaggettea geegaetitt
                                                                     180
cctgaaagta cccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga
                                                                     240
cagetteeac acagaactee ateccegggt ggeettetgg atcattaage tgeeacggeg
                                                                     300
gaggtcccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct
                                                                     360
gcaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctag aagaggggac 420
cgagagetee teccaeteca ggetgteece cegaaagaee caettactgt acatecteag
                                                                     480
gccctctcgg cagctgtag
                                                                     499
<210> 22
<211> 164
<212> PRT
<213> Homo sapien
<400> 22
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
1 10 15
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Pro
20 25 30
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg
                         55
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
65 70 75 80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
85 90 95
Pro Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
                                 105
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
                             120
Gly Thr His Lys Asp Val Leu Glu Glu Gly Thr Glu Ser Ser His
    130
                         135
                                              140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg
145 150 155
                                                               160
Ser Arg Gln Leu
```

```
<213> Homo sapien
<400> 23
caccatggga gaagecteec cacctgeece egeaaggegg catetgetgg teetget 60
getectetet accetggtga tececteege tgeageteet atecatgatg etgaegecea
                                                                     120
agagagetee tigggietea caggeeteea gageetacte caaggetica geegactiti
cctgaaagta cccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga
                                                                      240
cagettecae acagaactee ateccegggt ggeettetgg ateattaage tgecaeggeg
                                                                      300
gaggtcccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct
                                                                     360
gcaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctaa aagaggggac
                                                                     420
cgagagetee teccaeteea ggetgteeee ecgaaagaee caettactgt acateeteag
                                                                     480
gccctctcgg cagctgtag
                                                                      499
<210> 24
<211> 164
<212> PRT
<213> Homo sapien
<400> 24
Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val
                                      10
Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Ala Ala Ala Pro
                                  25
            20
Ile His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu
                             40
Gîn Ser Leu Leu Gîn Gîy Phe Ser Arg Leu Phe Leu Lys Vaî Pro Arg
                         55
Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser
                     70
                                          75
                                                               80
Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu
                                      90
Pro Arg Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu
                                 105
            100
                                                       110
Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys
        115
                             120
Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His
    130
                         135
                                              140
Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro
145
                     150
                                                               160
Ser Arg Gln Leu
<210> 25
<211> 499
<212> DNA
<213> Homo sapien
<400> 25
caccatggga gaagcctccc cacctgcccc cgcaaggcgg catctgctgg tcctgctgct 60
gctectetet accetggtga teccetecae tgeageteet atecatgatg etgaegeeea 120
agagagetee tigggietea caggeeteca gageetacte caaggeitea geegaetitt 180
cctgaaagta cccaggatgg aggagaagga ggccctggta cccatccaga aggccacgga 240
cagettecae acagaactee ateccegggt ggeettetgg ateattaage tgeeaeggeg
                                                                     300
gaggtcccac caggatgccc tggagggcag ccactggctc agcgagaagc gacaccgcct
                                                                     360
gcaggccatc cgggatggac tccgcaaggg gacccacaag gacgtcctaa aagaggggac 420
cgagagctcc tcccactcca ggctgtcccc ccgaaagacc cacttactgt acatcctcag 480
gccctctcgg cagctgtag
                                                                     499
<210> 26
<211> 164
```

<212> PRT

<213> Homo sapien

SEQLIST.TXT

<400> 26 Met Gly Glu Ala Ser Pro Pro Ala Pro Ala Arg Arg His Leu Leu Val 10 Leu Leu Leu Leu Ser Thr Leu Val Ile Pro Ser Thr Ala Ala Pro
20 25 30 The His Asp Ala Asp Ala Gln Glu Ser Ser Leu Gly Leu Thr Gly Leu 35 40 45 Gln Ser Leu Leu Gln Gly Phe Ser Arg Leu Phe Leu Lys Val Pro Arg 55 Met Glu Glu Lys Glu Ala Leu Val Pro Ile Gln Lys Ala Thr Asp Ser 75 Phe His Thr Glu Leu His Pro Arg Val Ala Phe Trp Ile Ile Lys Leu 85 90 Pro Arg Arg Ser His Gln Asp Ala Leu Glu Gly Ser His Trp Leu 100 105 110 Ser Glu Lys Arg His Arg Leu Gln Ala Ile Arg Asp Gly Leu Arg Lys 115 120 125 Gly Thr His Lys Asp Val Leu Lys Glu Gly Thr Glu Ser Ser Ser His 135 140 Ser Arg Leu Ser Pro Arg Lys Thr His Leu Leu Tyr Ile Leu Arg Pro 145 150 155 160 **150** Ser Arg Gln Leu

<210> 27 <211> 20

<212> DNA <213> Homo sapien

<400> 27

atcgacaagg tacccaggat

20

<210> 28 <211> 20

<212> DNA

<213> Homo sapien

<400> 28

ttcctgaaag tacccaggat

20